

METHOD FOR MANUFACTURING TUNGSTEN/POLYSILICON WORD LINE STRUCTURE IN VERTICAL DRAM AND DEVICE MANUFACTURED THEREBY

Abstract

An integrated circuit comprised of at least one semiconductor memory array and logic circuits. The memory array includes electrically conductive word lines. The logic circuits include logic transistors with electrically conductive gates. The gates of the logic transistors and the word lines are composed of polysilicon and a metal layer. The metal layer is thicker than the polysilicon layer in the word lines; and the metal layer is thinner than the polysilicon layer in the gates of the logic transistors.